

CLAIMS

We claim as our invention:

1. A mold for forming a cover for a golf ball, the mold comprising:
 - a spherical cavity formed therein;
 - hemispherical upper and lower mold cups being removably mated along a parting line that is distinct from the position corresponding to an equator line of the spherical cavity, each mold cup having an interior cavity detail, each mold cup having a mating surface forming the parting line;
 - the mold creating a pattern of dimples on the cover of the golf ball, wherein at least one dimple lies across an equator of the ball; and
 - the mating surface of each mold cup comprising multiple radii forming a plurality of peaks and valleys,
 - wherein when the mold cups are assembled the parting line follows the dimple outline pattern and allows the dimples of one mold cup to interdigitate with the mating mold cup to form a golf ball with substantially seamless appearance.
2. The mold according to claim 1, wherein the mold cups comprise a tapered interlock, the upper mold cup having a 360 degree projection rim extending therefrom and mating within a 360 degree recess defined in the lower mold cup, wherein the mold cups are in near perfect registration thereby minimizing shift on the molded ball.
3. The mold according to claim 2, wherein the projection rim of the upper mold cup and the recess of the lower mold cup mate interlock at an angle alignment away from the interior cavity detail.
4. The mold according to claim 3, wherein the angular alignment is about 15 degrees away from the interior cavity detail.

5. The mold according to claim 2, wherein the parting line along the outline pattern of the adjacent dimples is offset from the adjacent dimples by at least 0.001 inch.
6. The mold according to claim 2, wherein the mating surface of each mold cup is a result of a superposition of a base waveform with a secondary waveform, whereby wavelength of the secondary waveforms are substantially shorter than that of the base waveform
7. The mold according to claim 6, wherein the secondary waveform is continuous around equator of the molded golf ball.
8. The mold according to claim 6, wherein the secondary waveform is broken into individual segments that are applied in a periodic fashion to the base waveform
9. The mold according to claim 1, wherein the dimples of the molded golf ball are in an icosahedral arrangement pattern.
10. The mold according to claim 1, wherein the dimples of the molded golf ball are in an octahedral arrangement pattern.
11. The mold according to claim 1, wherein the dimples of the molded golf ball are in a cube-octahedral arrangement pattern.
12. The mold according to claim 1, wherein the dimples of the molded golf ball are in a dipyramid arrangement pattern.

13. A mold for forming a cover for a golf ball, the mold comprising:
a spherical cavity formed therein;
hemispherical upper and lower mold cups being removably mated along a substantially flat parting line, each mold cup having a interior cavity detail, each mold cup having a mating surface forming the parting line; and
the upper mold cup having a 360 degree projection rim extending therefrom and mating within a 360 degree recess defined in the lower mold cup, wherein the mold cups are in near perfect registration thereby minimizing shift on the molded ball.
14. The mold according to claim 13, wherein the projection rim of the upper mold cup and the recess of the lower mold cup mate at an angle alignment away from the interior cavity detail.
15. The mold according to claim 14, wherein the angular alignment is about 15 degrees away from the interior cavity detail.
16. The mold according to claim 13, wherein the flat parting line is located at the base of the recess analogous to a tapered counter bore.
17. A golf ball having a pattern of dimples and a corrugated parting line on its spherical surface, the golf ball formed in a mold which has a generally spherical cavity therein and is composed of upper and lower mold cups being removably mated along a parting surface at a position corresponding to an equator region of the spherical cavity of the mold, wherein the corrugated parting line of the golf ball is offset from the dimples as not to interfere with the dimple edge.
18. The golf ball according to claim 17, wherein the dimples on one side of the parting line interdigitate with the dimples on the other side to form a golf ball having a substantially seamless appearance.

- 19.** The golf ball according to claim 17, wherein the parting line along the profile of the equator dimples is offset from the equator dimples by at least 0.001 inch.
- 20.** The golf ball according to claim 17, wherein the corrugated parting line comprises multiple radii forming a plurality of peaks and valleys,
- 21.** The golf ball according to claim 20, wherein the corrugated parting line is a result of a superposition of a base waveform with a secondary waveform, whereby the secondary waveforms are substantially shorter than the base waveform
- 22.** The golf ball according to claim 21, wherein the secondary waveform is continuous around the equator of the molded golf ball.
- 23.** The golf ball according to claim 21, wherein the secondary waveform is broken into individual segments that are applied in a periodic fashion to the base waveform
- 24.** The golf ball according to claim 17, wherein the dimples of the molded golf ball are in an icosahedral arrangement pattern.
- 25.** The mold according to claim 17, wherein the dimples of the molded golf ball are in an octahedral arrangement pattern.
- 26.** The mold according to claim 17, wherein the dimples of the molded golf ball are in a cube-octahedral arrangement pattern.
- 27.** The mold according to claim 17, wherein the dimples of the molded golf ball are in a dipyramid arrangement pattern.